



Illinois Department of Transportation

Memorandum

To: DIRECTORS, DEPUTY DIRECTORS, AND BUREAU CHIEFS
From: Dianna L. Taylor
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: October 15, 2015

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement October 16, 2015 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Thursday, October 29, 2015**. Applicants will not be accepted after that time and date.

NOTE: Applications will be accepted from qualified permanent DOT employees only. A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact Halie Zulauf or Denise Hamilton at 217/782-5594.

CE V

Structural Design & Review Group Engineer
Bureau of Bridges & Structures
Highways
Springfield

Attachments
40542

Technical Applications (PM 1080) **must be received** by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) by **Thursday, October 29, 2015, 4:30 p.m.** Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: Applications will be accepted from qualified permanent DOT employees only. A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position.



**Illinois Department
of Transportation**

An Equal Opportunity Employer

Position Summary Sheet

Classification:	Civil Engineer V	Salary Range:	\$6,315 - \$10,210
Position Title:	Structural Design & Review Group Engineer	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW115-23-50-904-20-01	IPR#:	40542

Office/Central Bureau/District/Work Address:

Division of Highways/Bureau of Bridges and Structures/2300 S. Dirksen Parkway, Springfield, IL

Description Of Duties:

This position is responsible for directing the timely review, investigation, and approval of bridge plans prepared for the Department and local agencies by consultants and in-house staff, and for the review, investigation and approval of bridge plans prepared by local agencies. This position is also responsible for directing the timely review and approval of construction submittals and the investigation and solution of construction problems associated with change of conditions, contractor errors or plan errors.

Special Qualifications:

The following criteria is required:

- A current Illinois Professional Engineer license

The following criteria is designed:

- Nine years of experience in civil engineering of which at least five years should be in the specific area of structural engineering, three years of which should have been supervising engineering functions
- Licensed Structural Engineer in Illinois
- Strong communication and problem-solving skills

Shift/Remarks:

8:00 am – 4:30 pm / Monday - Friday

**ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION**

DATE:	July 2015	POSITION:	Structural Design & Review Group Engineer
APPROVED BY:	Jayme Schiff	OFFICE/DIVISION:	Division of Highways/Bureau of Bridges and Structures
CODE:	PW115-23-50-904-20-01	REPORTS TO:	Consultant Bridge Design & Construction Review Unit Chief

Position Purpose

This position is responsible for directing the timely, review, investigation, and approval of bridge plans prepared for the Department and local agencies by consultants and in-house staff, and for the review, investigation, and approval of bridge plans prepared by local agencies. This position is also responsible for directing the timely review and approval of construction submittals and the investigation and solution of construction problems associated with change of conditions, contractor errors, or plan errors.

Dimensions

Subordinate Personnel:	4 – 5
Annual Program:	\$65,000,000.

Nature and Scope

This position reports to the Consultant Bridge Design & Construction Review Unit Chief. Reporting to this position are the Senior Structural Design Engineers, Structural Design Engineers, Associate Structural Design Engineers, and an Assistant Structural Engineer, and Structural Design Engineer Trainees.

This position operates within an environment of ensuring that structures are designed economically, are structurally adequate, and provide maximum safety and durability. This position is responsible for managing a group of engineers in the structural analysis, review, and approval of plans for all types of bridges, culverts, and other complex structures designed by consultants, in-house staff, and local agencies. This position is also responsible for managing a group of engineers in approving construction submittals and investigating and solving construction problems.

Typical problems faced by the incumbent include the necessity to ensure that all structure types, which range from routine to extremely complex, reviewed under his/her supervision, are structurally sound and that approved plans are in accordance with established State and Federal policies, structural codes, and AASHTO design specifications. Problems are compounded by the fact that each structure is unique and while basic guidelines are followed, the structural analysis and economic judgments associated with assuring the quality of the plans must be performed individually. An additional problem faced by the incumbent is the necessity to confer with consultants in a firm and effective manner in order to ensure that alterations required on detail plans are accomplished to eliminate flaws and comply with established criteria. The greatest challenge faced by the incumbent is to quickly locate potentially serious flaws in a set of plans prior to assignment for an in-depth structural analysis. The incumbent is also challenged to keep abreast of new developments in structural designs and materials in order to ensure the utilization of the most effective safe and economical design concepts. For processing construction submittals and solving a wide variety of construction problems, the greatest challenge faced by the incumbent is to respond quickly to requests from the field with structural solutions to avoid delays to the contractor.

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Division of Highways/Bureau of Bridges and Structures

The incumbent personally assigns projects to his/her subordinates commensurate with their engineering expertise and monitors their progress to assure adequate review, analysis, and timely completion of projects. He/she directs the work in progress and advises and trains subordinates in proper structural analytical procedures and plan review techniques, and ensures that standard procedures and required documentation are maintained. He/she is responsible for adjusting work schedules when required and to consult with his/her superior concerning potential problems in meeting priority commitments. He/she is responsible for evaluating, training, and managing subordinates and recommending salary adjustments and initiating disciplinary actions. The incumbent is also responsible for evaluating the performance of consultants. The incumbent must be effective in resolving conflicts with consultants to ensure meeting scheduled commitments.

The incumbent accomplishes his/her accountabilities through the following staff:

Senior Structural Design Engineer – under direction performs complex designs and reviews of structure plans/construction submittals and verifies working drawings used in the field.

Structural Design Engineer – under general supervision performs designs and reviews of difficult structure plans/construction submittals and verifies working drawings used in the field.

Associate Structural Design Engineer – under direct supervision performs designs and reviews of moderately difficult structure plans/construction submittals and verifies working drawings used in the field.

Assistant Structural Design Engineer – under immediate supervision, performs a limited scope of designs and reviews for structure plans/construction submittals and verifies working drawings used in the field.

The incumbent must refer to his/her supervisor for resolution of problems concerning deviations from department policies, specifications, and standards. The incumbent must consult with his/her superior concerning actual or potential scheduling problems and provide recommended solutions. The incumbent must be effective in resolving conflicts with consultants/contractors to ensure meeting scheduled commitments. The incumbent is guided by AASHTO specifications and current interim specifications and applicable departmental policies.

The incumbent has frequent contact with consultants, railroad companies, the Districts, the Central Bureaus of Construction, Local Roads and Streets, contractors, and fabricators in resolving problems discovered during the structural review process or when problems are encountered in the field. He/She also has contact with other Units within the Section and other Sections within the Bureau when performing special studies or resolving problems.

The effectiveness of this position is measured by the ability of the incumbent in managing an engineering staff and ensuring the structural adequacy, completeness of bridge and structure plans and cost-effective, structurally adequate solutions to construction problems. Effectiveness is also measured by the timely completion of the assigned tasks so that the Department's letting schedule can be met and by the quality of training received by subordinates in the field of structural analysis and design.

Principal Accountabilities

1. Directs the structural analysis and review of bridge and traffic structure plans prepared by in-house and outside agencies to ensure structural adequacy and completeness of design.
2. Directs the analysis, review and approval of contractor proposals related to shoring, bracing and temporary structures. Directs the investigations and solution to various construction problems.
3. Assigns, directs, and monitors design projects to ensure schedule commitments.

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4. Ensures the effective resolution of conflicts with consultants when directing the alteration of improperly prepared plans.
5. Develops trains, motivates, and evaluates subordinates.
6. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
7. Performs other duties as assigned.